BMHA Newsletter

BICYCLE MOBILE HAMS OF AMERICA

Volume II Number 3 *July 1991*

ABOUT BMHA

Bicycle Mobile Hams of America got its start when a "Stray" in the June '89 issue of QST asked to "get in touch with hams who operate bicycle-mobile, or in any other human-powered conveyances", signed by Hartley Alley, NA0A.

25 hams responded, filled out questionnaires, and received a summary of the collected info.

Then in April of '90 we had our first BMHA Forum at the Dayton HamVention. We played to a packed house, overflowed the tiny room assigned to us, and added 54 names to our mailing list. Our '91 forum at the HamVention was again well-attended, and now BMHA is on the way to being established as a "regular" at this annual event.

This is the fourth issue of our newsletter. Inspite of the usual awkward beginning period the BMHA NewsLetter has become a clearing house for the exchange of info and ideas for the hams who go on the air from their bicycles.

Since last January our paid membership has grown from 47 to 103.

BMHA NET. . .ON 20

The BMHA HF net is still going strong and has become a regular meeting place for bikie-hams, whether out on the bike or just sitting in the shack.

Mike Nickolaus, WF0N, the net control, will call the net from RAGBRAI -- the mammoth ride across Iowa. Listen for Mike and check into the net on Sunday July 21. After an 80 mile day on the bike Mike will call the net from his motor home.

Freq ----14.253 (plus or minus three)
Time ----2330 UTC
Day ----1st & 3rd Sunday of each month

EDITOR'S COLUMN

Just yesterday I sprung for a PC -- a full-blown 386 with the capability of doing many different things. I'll be able to run packet, monitor HF for DX, and do word-processing, all at the same time. But most important, I have PageMaker and an HP III-P laser printer, all of which means that the next issue of the BMHA NewsLetter should look pretty slick. Now all I have to do is learn how to run this fearsome equipment.

I'd like to again invite all you bikie-hams to send in your writings about your rigs, your home-brewings, your adventures, your experiences while bicycle-mobile. To those who missed their DEADLINES, please buckle down and get your stuff in for the October issue. The deadline is Aug 20.

'92 DAYTON HAMVENTION

We'll soon start dickering with the Forum Chairman for a Saturday or Friday place on the program. Consensus seems to be that Sunday is the least desirable of the three days. More later.

TREASURY REPORT
Fiscal year July 1, 1990 to June 30, 1991

Dues money received:		$815.50
Expenses:		
Xerox	322.15	
postage	221.55	
stationery & misc.	70.20	
Total Expenses		613.90
Bank balance on hand:		$201.60

As you can see, we're still just squeaking by. In a separate mailing, members will soon receive notice that renewal of membership fee is due.

Thanks to all who wished me speedy recovery. The doctors and I are happy with the progress. I'm walking an hour a day at a good clip, and cycling 15 to 20 miles, 2 or 3 days a week.

----NA0A, Editor

HELPING THE NON-HAMS

PUBLIC SERVICE AND THE BICYCLE MOBILE HAM

I put my bicycle mobile gear together for the fun and enjoyment of operating while on the road. I also had in mind the ability to call for help if I ever would need it. I did not anticipate using the equipment for any kind of public service, but shortly after getting the setup working on my road bike, there was an MS Walk-A-Thon here in Boulder.

I volunteered my services as a trouble-shooter on a bike, and without really thinking about it, added that I had bicycle mobile capabilities if that would help, and that I would be communicating with the other hams who would be working the event. The idea was immediately embraced, and on the day of the event, my tactical call became 'bicycle one'. I didn't know what kind of terrain I would need to go over, so I rode my mountain bike. As with my touring bike, I strapped the HT to the handlebars at the stem with a small piece of bungee, and used an SS-10 boom mic.

It was an uneventful day, except for the rest stop outhouses blowing over every so often! (Boulder is an exceptionally windy town. When it really blows here -- 100 mph -- we wind up on national TV.) At the rest stop where the johns had blown over, I had to relay some messages to net control. The other amateurs stationed at the stop could not be heard over the wind noise, but my boom mic was completely impervious! While no emergency traffic was handled, I began to realize the potential that bicycle mobile operators have for helping out at an organized event.

Later in the year, I signed up to ride a local century event. The sponsoring bicycle club had traditionally used a Racet (CB) group for communications and sag support. In the last few years that I have ridden in this event, I felt the CB'ers were sincerely trying to help, but their organizational skills and the propagation of their 11 meter units made for a pretty marginal operation at best. I decided to take my TH-21 and my new 5/8 wave rack-mounted vert along for the ride. As I pulled into the first rest stop, I discovered a suspicious looking license plate in the parking lot. To my delight, I found that a local group of hams had volunteered to provide communications!

The ham at the rest stop encouraged me to check into the net. I thought I would not be able to make the repeater with one watt, but the 5/8 wave came through, and I checked in. As luck would have it, I came upon an ambulance and a state patrol car within three miles of the rest stop. They were loading a young woman into the ambulance. I got as much of the story as I could from the state trooper, and called it in to net control. The net con immediately got in touch with the president of the bike club who drove up just as the ambulance was leaving. He was quite impressed with the response and professionalism of the hams involved.

I was able to forward the young lady's name and condition (severe muscle cramps) to net control, and they were able to contact her family to tell them her condition and what hospital she was in. For the next two hours, cyclists were reporting the incident as they got to other rest stops. Whenever we got another report, I was able to talk with the other rider to ascertain whether it was the same incident and thus prevent a lot of running around for nothing.

I managed to call in quite a few sag requests as well as some repair requests. I was now really convinced that the bicycle mobile operator has a real place in these types of organized activities.

The last, and largest event of the year was another MS sponsored event, with three bicycle rides around and through Boulder. There were several hams involved as communicators, but as I found out later, with the exception of the net control and two hams in sag wagons, the rest were all running the course in their cars. I elected to do the 100 K route. By 7:00 in the morning I was stuffing donuts and half-frozen orange juice into my face. I let a hundred or so of the first riders go before I started, then I just followed the course as I had on the previous ride, pedalling along and monitoring the net. It was much the same, calls for sag and repair support, and enjoyment of the ride!

Somewhere out in the middle of farm country, a call went out for "sag one" and any repair vehicle. There was no ham in that sag vehicle, and none of the repair units had hams. As circumstance would dictate, I spotted the sag vehicle and waved him over. Right then a repair vehicle rounded the corner and I flagged him down as well. How is it possible that within minutes of requesting two roving vehicles, that the solo bicycle mobile station could find both of them in the same place?

Happenstance aside, the bicycle mobile has a place in public service. Next time you get called upon to do a little public service, give a thought to using both of your hobbies for a good cause. Of course the fact that the events are lots of fun has nothing to do with it...

Len Koppl, KD0BC @ WA6ZIA
4990 Osage Dr. #C5
Boulder, CO 80303

The "Gentleman's" Roadster,

Fitted with Luggage-Carrier and Registered Bag (patent Lock), constructed to carry a change of linen, a suit of clothes, shaving and dressing tackle, road-map, and a macintosh or cape.

SAFETY

OPERATING HANDS-FREE IN BIG-CITY TRAFFIC

Bicycle mobile commuting in an urban area can't be done as casually as in the country. We all want our on-bicycle radio rigs to be efficient, reliable and easy to operate, but the overriding consideration in an area like metropolitan Boston is safety. It's obvious that a system that compromises safety should never be used. And with that in mind, the following system is predicated on having a bicycle with straight handlebars, which allows the rider's hands to be at the brakes at all times.

EQUIPMENT

My equipment consists of an Icom IC-2AT with an HS-10 headset, and a modified HS-10SB switch box.

The HT is in a long carrying bag -- available at most bike shop -- strapped vertically to the handlebars at the gooseneck. The antenna is a J-pole made according to the excellent instructions in AE2T's article (see BMHA Newsletter, April 1991, pp. 2,3.)

MODIFYING THE SWITCH BOX

For ease of operation, I replaced the three-position toggle switch with a momentary contact SPST pushbutton type of switch -- Radio Shack 275-1571 or equivalent.

Take a small knife and run it between the top metal plate and the plastic case. Gently remove the plate and the back of the box. De-solder the two wires coming from the circuit board at the switch. In order to remove the switch you will have to remove the screw that holds the circuit board. Take the plate and widen the slot enough to mount the pushbutton switch. Make sure that you measure the body of the switch so you know it will clear the circuit board. Re-install the plate with some adhesive-like rubber cement that will allow its removal later in case of trouble.

Solder the two leads from the circuit board to the switch and replace the back. Then mount the box underneath the right or left side of the handlebar with the switch facing inward so that when your hands are in normal riding position you can operate the pushbutton with your thumb. Mounting the switch box with electrical tape works well.

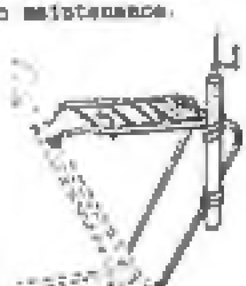
The vulnerable spot in the system is that the mini phone jack on the box inevitably gets banged around and ceases to work. The answer is to tack-solder wires to the circuit board and run an external in-line jack. It isn't pretty, but it is thoroughly reliable.

MOUNTING THE J-POLE

Take a suitable length of 1 1/4" dowel and drill a 3 or 4 inch hole down the center equal to the O.D. of your tubing. Mount the dowel near the back of your rear carrier with two hose clamps, using the diagonal brace as the other fastening point. If it is not straight up and down, a shim will do nicely. Again, this system is not pretty, but it is absolutely solid and stable. And it needs no maintenance.

Happy and safe commuting!

Laurie Cote, KC1BH
36 Circuit St
West Medford, MA 02155



BMHA NEWSLETTER

EDITOR: Hartley Alley NA0N

BOARD OF ADVISORS: Russell Dwarshuis KB8U, Lee Koppl KD0RC, Mike Nickolaus NF0N, Bob Pelham KE6ZJ

We welcome articles, suggestions, announcements, letters, photos, artwork --- anything pertaining to bicycling while operating an amateur radio, or vice versa!

Submitted material will be edited for clarity, and if necessary, shortened to fit space constraints.

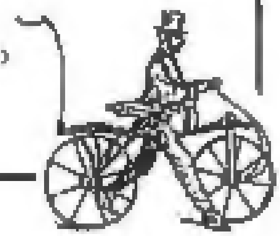
Material should be submitted before Dec.1, Mar.1, June 1. or Sept.1 for inclusion in the ensuing issue.

BMHA NEWSLETTER is the quarterly publication of the Bicycle Mobile Hams of America. Issued in Jan, Apr, July, and Oct.

TELEPHONE: 303-494-6550

BICYCLE MOBILE HAMS OF AMERICA (BMHA)
Box 4009, Boulder, Colorado 80306

ANNUAL DUES: $10



BITS AND PIECES

BEHEMOTH

Don't miss the current (August) issue of BICYCLING magazine. Turn to page 56 and you'll be dazzled by the double-page photo of BMHA'er Steve Roberts, N4RVE, and his 1.2 million dollar bicycle. Yes, $1,200,000! Steve's bike and trailer is loaded with all kinds of electronic and communication gear including, of course, ham radios. All told it weighs about 350 lbs, hence the name, BEHEMOTH.

As a break-in, Steve will ride RAGBRAI, the July 21-27 Great Ride Across Iowa, and from there a swing to New York and the long trek back to his home base in California. We expect Steve will be checking into the BMHA net -- see page 1.

CW ONLY

From a BMHA'er who rides a Schwinn and a Harley: "The Motorcycle Post Office Net (MPO) meets most days around 14063 khz at 2130 UTC. All weak-signal formal Radiogram Traffic welcome, such as that from bicycle mobile stations. Send inquiries to NX1L, MPO Net Manager, 79 Hancock St. Lexington, MA 02173."

CLUBS & EVENTS

THE MOB RIDES AGAIN

Twenty three of the 180 members of the Downey (California) Amateur Radio Club operate bicycle mobile at one time or another. All operate 2 meter simplex and all use HTs with most wagging long J-pole antennas.

Downey is located on a network of hundreds of miles of paved bicycle paths which run along LA basin river beds. These paths provide bicycle mobiles with ample opportunities for short or long rides with minimal exposure to high traffic density streets.

DARC's "MOB" (Mobile On a Bike) is not exactly a group of youngsters. Although the youngest is in his early twenties, most are much older, the oldest being over seventy. Only one races, but half of the regulars, including the oldest, ride centuries at almost every opportunity, frequently making their own opportunity. Although there are a few "SOBs" (Solo On a Bike), most ride in groups of three to ten, and these groups typically ride twenty to fifty miles three times a week.

One of several special interest groups within the DARC, the MOB has its own shirts, emblazoned with its own symbol (see illustration), its own column in the Club's monthly bulletin, and even a bit of its own special language. "Weather wimps" don't ride at temperatures below 50 degrees. "River rats" ride the mostly level riverside bike paths, while "hill billies" (called "hill bellies" by the river rats) ride the more mountainous paths.

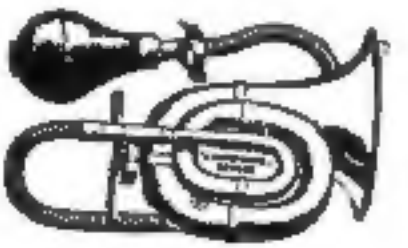
Once the group was riding when one of our stronger earthquakes struck. "Thought I had a flat," and "Thought I was skidding," were the most common reactions, but swaying power poles and power lines told the real story. All riders split for their respective homes only to find minimal damage: a broken dish or two and maybe some cracked plaster. Nearby Whittier did not fare so well.

The MOB has had its share of typical bicycle injuries. Lots of bruises and scrapes, a few lacerations requiring sutures, a broken arm, and one scary period of 25 minutes of unconsciousness. Usually our radios have enabled us to summon pickups for broken bikes or minor injuries for ourselves or others, and an ambulance or two have been summoned for more serious injuries.

Frequently supporting bike rides sponsored by various organizations, the DARC usually provides a base control station, portables along the route, bicycle mobiles more or less evenly spaced among the riders and one bike mobile "sweep" bringing up the rear to ensure no one is left behind.

Our most intense emergency occurred while supporting a Kawasaki-sponsored half-century. The MOB had to call for police help when a sniper took a few pot shots at or near participating bikers. An astonishing number of police and a police helicopter rounded up the sniper in short order.

Warren Pope, K6JFX
8420 Quine St
Downey, CA 90241



THE IRONBUTT 24 HOUR MARATHON
October 12-13, 1991
Oklahoma City, OK

Here is an event for the masochist among us. An opportunity to suffer sleep deprivation and pain simultaneously. I have first hand experience having participated in the inaugural running of the event (I rode a paltry 258 miles, couldn't handle the lack of sleep and stopped for a nap during the night). I think I'll limit my participation to support from now on ....I just love to watch suffering.

All kidding aside, IRONBUTT is a great event with opportunities to receive UMCA National points and set nationally recognized records in 5-year age groups in male, female, and tandem categories.

For those of us who are not so gung-ho there is a new event called TINBUTT, a 12 hour event, which also serves as a qualifier for IRONBUTT. TINBUTT will be held on June 28 at the same location. You may also qualify for IRONBUTT by riding at least 200 miles in 24 hrs. For further info contact me via packet (WA5JRH @ WB5PVK.OK) or the event promoter, Red Callaway, 4505 N. Utah Ave. Oklahoma City, OK 73112 (405)942-4592.

Hank Blackstock, WA5JRH
P.O. Box 20081
Oklahoma City, OK 73156-0081

HOME-BREW PROJECTS

A CHEAP GROUNDPLANE FOR YOUR VERTICAL

I have a 1/4 wave and a 5/8 wave 2 meter mag-mount that I use for my bicycle mobile operations. They work much better than a rubber duck, but due to the bicycle's poor groundplane they do not perform as well as they would on a car roof. Since I run an IC-2AT, with only 1.5 watts maximum output, I need all the help I can get in using it most efficiently. I set about trying to find some kind of a groundplane for the bike.

I tried a number of ideas, hoping to find a good, lightweight groundplane. I took the steel rack from my old Sears 3-speed and put it on my mountain bike, which I run my bicycle mobile operations off of. The mag-mounts stuck to it by themselves, but there was no difference in the signal strength. A few times I put a steel cookie sheet on the rack and put the mag-mount on top of that. That improved my signal tremendously, but was too cumbersome for normal use.

Finally, one day when I was talking with a friend on the local repeater, it hit me. I was at home using the HT with my homebrew groundplane that hangs in a corner of my shack. I thought to myself, "A simple 1/4 wave radiator really doesn't do much of anything, but with RADIALS I can hit the repeater 20 miles away almost DEQ on low power. It's all in the radials..."

After the chat I went downstairs and decided to try to build a set of radials --- not a full groundplane, just radials. I used some steel wire left over from my direction-finding antenna. I cut two lengths of wire about 4 feet long. The length is not important since I trimmed them down later. The actual length also depends on the width of your rack. I then twisted the two pieces of wire together in the middle to form an X and soldered them. Then I put them on my bike sandwiched between the rack and the antenna. I bent the radials down at a 45 degree angle at the edge of the rack, not right at the center point. I figured that even though the bike frame itself is not a good groundplane, it still might help somewhat, so I made sure that the antenna ground still made contact with the frame. I measured 19 inches (for 2 meters) from the edge of the rack, again not including the length of wire that is on the rack, and cut the radials to size. Then it was time to test it.

I put the 5/8 mag-mount on the rack without the radials and joined some friends on a fairly distant repeater. Then I put the radials on by sandwiching them between the rack and the antenna. On my next transmission I asked if there was any improvement. Everyone said that it was a drastic improvement! The simple addition of radials worked just as well as the cookie sheet, and they were lightweight and easily removable. The nice thing about the steel wire is that it is strong enough to keep its shape, but it is still flexible enough not to break if you manouver a little too close to a tree, car, or person. Even is they do get bent, they can easily be bent back into shape. This is the best groundplane I know of right now for a bicycle. It can easily be adapted for use with a "permanent" antenna, too. It is very cheap, easy to build, and brings a vast improvement to your signal. What more could a bicycler mobiler want?

Justin Hughes, KA1ULT
252 Stow Rd.
Harvard, MA 01451

MEMBERSHIP APPLICATION

(check one) new member____ renewal____

BICYCLE MOBILE HAMS OF AMERICA (BMHA)
Please complete and return to:
BMHA
PO Box 4009
Boulder, CO 80306

*Date*_____

*Name*_____ *Call*_____ *License Class*_____

*Address*_____

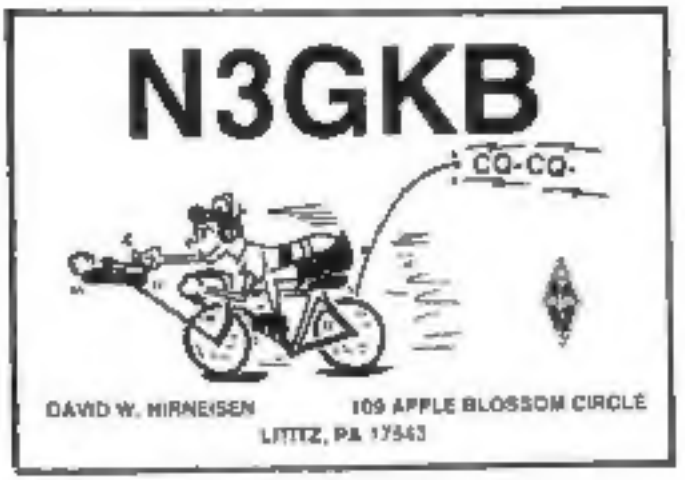
*City,State*_____ *Zip*_____

Regular Membership: $10 per year
Additional contributions will help defray cost of preparing and mailing the quarterly BMHA NewsLetter.

*Enclosed is my check for $*_____
(Make checks payable to BMHA, Bicycle Mobile Hams of America)

QSL CORNER

In this space we feature QSL cards that have a bicycle-mobile motif. Send yours in. We'll run it.



CONTACT

This is a new department in the BMRA NewsLetter, the object being to establish a clearing house where our readers can exchange information. Send in your request -- we'll run it.

"I'd like to contact anyone who has had experience using solar power on the bike while under way."
Hartley Alley, WA0A 303 494 6559
Box 4009
Boulder, CO 80306

BMRA NEWSLETTER
Bicycle Mobile Ham of America
PO Box 4009
Boulder, CO 80306

Address Correction Requested

First Class Mail